

What is claimed is:

1. A system for operating an aircraft, comprising:
  - a navigation computer comprising:
    - a first input configured to receive guidance instructions,
    - a second input configured to receive guidance parameters, and
    - an output configured to output automatic pilot instructions; and
  - a flight control computer comprising:
    - a first input configured to receive control instructions,
    - a second input configured to receive said automatic pilot instructions, and
    - a command generator configured to generate a first plurality of operating commands based on said automatic pilot instructions in an automatic pilot mode.
2. The system of Claim 1, wherein said command generator is configured to generate a second plurality of operating commands based on said control instructions in a manual pilot mode.
3. The system of Claim 1, wherein said flight control computer further comprises a third input configured to receive control parameters.
4. The system of Claim 1, wherein said command generator is configured to generate said first and second pluralities of operating commands based on a single control function.
5. The system of Claim 4, wherein said single control function is embedded in said flight control computer.
6. The system of Claim 1, wherein said navigation computer generates said automatic pilot instructions based on said guidance instructions and on said guidance parameters.
7. The system of Claim 6, wherein said automatic pilot instructions correspond in nature to said control instructions.

8. The system of Claim 7, wherein said automatic pilot instructions and said control instructions correspond to a commanded vertical load factor.

9. The system of Claim 7, wherein said automatic pilot instructions and said control instructions correspond to a commanded roll rate.

10. The system of Claim 7, wherein said automatic pilot instructions and said control instructions correspond to a commanded yaw.

11. The system of Claim 1, wherein said flight control computer is directly connected to said navigation computer and receives said automatic pilot instructions directly from said navigation computer.

12. A system for operating an aircraft, comprising:  
a navigation computer comprising:

means for receiving guidance instructions,

means for receiving guidance parameters, and

means for outputting automatic pilot instructions; and

a flight control computer comprising:

means for receiving control instructions,

means for receiving said automatic pilot instructions, and

means for generating a first plurality of operating commands based on said automatic pilot instructions in an automatic pilot mode.

13. The system of Claim 12, wherein said flight control computer further comprises means for generating a second plurality of operating commands based on said control instructions in a manual pilot mode.

14. The system of Claim 12, wherein said flight control computer further comprises means for receiving control parameters.

15. The system of Claim 12, wherein said first and second pluralities of operating commands are based on a single control function.

16. The system of Claim 15, wherein said single control function is embedded in said flight control computer.

17. The system of Claim 12, wherein said navigation computer further comprises means for generating said automatic pilot instructions based on said guidance instructions and on said guidance parameters.

18. The system of Claim 17, wherein said automatic pilot instructions correspond in nature to said control instructions.

19. The system of Claim 17, wherein said automatic pilot instructions correspond to a commanded vertical load factor, commanded roll rate, and a commanded yaw.

20. The system of Claim 19, wherein said control instructions correspond to a commanded vertical load factor, commanded roll rate, and a commanded yaw.